

From the INTERNATIONAL BUREAU

**PCT**

**NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

(PCT Rule 72.2)

To:

TS Eingang

05. April 2005

ZF FRIEDRICHSHAFEN AG  
88038 Friedrichshafen  
ALLEMAGNE

Date of mailing ( <i>day/month/year</i> ) 31 March 2005 (31.03.2005)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference 8410 WO P GEB-FRI	
International application No. PCT/EP2003/008511	International filing date ( <i>day/month/year</i> ) 01 August 2003 (01.08.2003)
Applicant ZF FRIEDRICHSHAFEN AG et al	

**1. Transmittal of the translation to the applicant.**

The International Bureau transmits herewith a copy of the English translation made by the International Bureau of the international preliminary examination report established by the International Preliminary Examining Authority.

**2. Transmittal of the copy of the translation to the elected Offices.**

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following elected Offices requiring such translation:

KR

The following elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

EP, US

**3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).**

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report.

**It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.**

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No.+41 22 740 14 35	Authorized officer  Ellen Moyse  Facsimile No.+41 22 338 89 75
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Translation

PATENT COOPERATION TREATY

PCT/EP2003/008511



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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 8410 WO P GEB-FRI	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/008511	International filing date (day/month/year) 01 August 2003 (01.08.2003)	Priority date (day/month/year) 07 August 2002 (07.08.2002)
International Patent Classification (IPC) or national classification and IPC F16D 48/06		
Applicant ZF FRIEDRICHSHAFEN AG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 1 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☒ Lack of unity of invention
- V ☐ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 31 January 2004 (31.01.2004)	Date of completion of this report 01 December 2004 (01.12.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/008511

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed
- ☒ the description:  
pages \_\_\_\_\_ 1-11 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_ 1-4 \_\_\_\_\_, filed with the letter of 24 May 2004 (24.05.2004)
- ☒ the drawings:  
pages \_\_\_\_\_ 1/1 \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.  
These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/08511

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims	1 - 4	YES
	Claims		NO
Inventive step (IS)	Claims	4	YES
	Claims	1 - 3	NO
Industrial applicability (IA)	Claims	1 - 4	YES
	Claims		NO

**2. Citations and explanations**

1. US-A-5 613581 (D1) describes a mobile vehicle having a shiftable transmission with fixed transmission stages, with a friction clutch that can be engaged by means of actuation force, with an inch pedal, the pedal travel of which is registered by a travel sensor and fed to an electronic control device, the electronic control device reducing the actuation force of the multi-disc clutch as a function of the pedal travel when the inch pedal is actuated and said multi-disc clutch being brought thereby into the slip state, the initial position and the final position of the inch pedal being detected by the electronic control device and associated with an inch characteristic curve.

This document does not indicate explicitly that the inch pedal travel lies within the movement travel range of the travel sensor, the starting position and the final position of the inch pedal being associated with either the 0% and 100% inch effect characteristic curve by electronically adjusting the travel sensor.

These features were, however, already used for the same purpose in a similar pedal arrangement; see US-A-5 161405 (which was not cited in the international search report).

If a person skilled in the art wished to achieve the same aim in an inch pedal as per document D1, he could easily apply these features to like effect to the subject matter of D1. In this way he would arrive at a mobile vehicle according to claim 1 without thereby being inventive.

Therefore, the present application does not meet the requirements of PCT Article 33(1), because the subject matter of claim 1 does not involve an inventive step within the meaning of PCT Article 33(3).

2. The inch characteristic curve in D1 has an inch effect of 0% to 100%, and therefore the subject matter of claim 2 likewise lacks an inventive step.

3. D1 provides no detail with respect to the point of overlap starting from which the inch pedal has an effect on the operating brake. The possibility of shifting this point so that the brake is actuated when the inch pedal is more or less actuated is, however, a simple, generally known measure that a person skilled in the art would choose according to the circumstances in order to solve the problem of interest, without thereby being inventive.

Therefore, the subject matter of claim 3 lacks an inventive step.

4. Claim 4 lacks clarity. It is not clear what change in movement is involved. According to the description, page 4, last paragraph and page 5, first paragraph, only detection at a clearly determined point in time of a change in movement can solve the problem to be solved by the subject matter of this claim.

5. None of the cited documents discloses all of the

features of claim 4, insofar as it can be understood in light of the lack of clarity mentioned above. Therefore, the subject matter of this claim appears to be novel.

6. D1 describes the closest prior art. With regard to the features contained in D1, see the first paragraph.

In this vehicle, the operating brake is actuated starting from a previously selected inch pedal angle of actuation. Therefore, a problem arises owing to the fact that there is no opportunity for the vehicle user to adjust the pedal as desired.

7. In order to solve this problem, the application proposes selecting the inch pedal travel as described in the last paragraph of page 4 and the first paragraph of page 5, in which an operating brake is activated.

8. None of the cited documents discloses these features and it does not appear to be obvious to include them in the vehicle known from D1. Therefore, it appears that a clarified claim 4 could involve an inventive step.